Louisiana Student Standards for Science
Grade 3

Inspire Science

Grade 3 Version 2
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Page references: SN= Student Notebook, TE= Teacher Edition

PERFORMANCE EXPECTATION	MODULE - LESSON
MOTION AND STABILITY: FORCES AND INTERACTIONS	
3-PS2-1. Plan and conduct an investigation to provide evidence of the effects of balanced and unbalanced forces on the motion of an object. **Clarification Statement** Examples could include an unbalanced force on one side of an object that can make it start moving, or balanced forces pushing on an object from opposite sides will not produce any motion at all. Investigations include one variable at a time: number, size, or direction of forces.	**MODULE - Motion and Forces - Lesson 2**: **Forces Can Change Motion** Explore Inquiry Activity: Force Affects the Way Objects Move (SN:23-24, TE:20) Explain Inquiry Activity: Balanced Forces (SN:27-28, TE:27) Elaborate Inquiry Activity: Friction Affects Force (SN:32-34, TE:30) Evaluate Performance Task: Building Demolition (SN:34, TE:32) **Lesson 3**: **Simple Machines** Elaborate Inquiry Activity: Build a Simple Machine (SN:46, TE:43) Evaluate Performance Task: Test a Simple Machine (SN:48, TE:45) **Science Handbook –** Types of Forces p.232-233
3-PS2-2. Make observations and/or measurements of an object's motion to provide evidence that a pattern can be used to predict future motion. **Clarification Statement** Examples of motion with a predictable pattern could include a child swinging in a swing, a ball rolling back and forth in a bowl, or two children on a see-saw.	**MODULE – Motion and Forces – Lesson 1: Motion** Evaluate Performance Task: Motion Models (SN:16-18, TE:16-17) **Lesson 2: Forces Can Change Motion** Explore Inquire Activity: Force Affects the Way Objects Move (SN:23-24, TE:20-21) **Lesson 3: Simple Machines** Explore Inquiry Activity: Simple Machines Lift Objects (SN:39, TE:36) Performance Project: Observe Motion on a Playground (SN:50-51, TE:48-49) **Science Handbook –** Motion p. 220-227

PERFORMANCE EXPECTATION	MODULE - LESSON
3-PS2-3. Ask questions to determine cause and effect relationships of electric or magnetic interactions between two objects not in contact with each other. **Clarification Statement** Examples of an electric force could include the force on hair from an electrically charged balloon or the electrical forces between a charged rod and pieces of paper; examples of a magnetic force could include the force between two permanent magnets, the force between an electromagnet and steel paper clips, or the force exerted by one magnet versus the force exerted by two magnets. Examples of cause and effect relationships could include how the distance between objects affects the strength of the force or how the orientation of magnets affects the direction of the magnetic force. Examples could include forces produced by objects that can be manipulated by students, or electrical interactions could include static electricity.	**MODULE - Electric and Magnetic Forces - Lesson 1: Electricity** Explore: Inquiry Activity: Charged or Uncharged Balloons (SN:57-58, TE:54-55) Online Simulation: Does Distance Make a Difference? (www.connected.mcgraw-hill.com) Explain: Inquiry Activity: Eliminate Static Electricity (SN:63-64, TE:60-61) Evaluate Performance Task: Teach Static Electricity (SN:67-68, TE: 64-65) **Lesson 2**: **Magnets** Explore: Inquiry Activity: Investigate with Magnets (SN:73-74, TE:68-69) Explain: Inquiry Activity: Distance and the Pull of a Magnet (SN:76-77, TE:72) Explain Inquiry Activity: Magnetic Forces Pass Through Objects (SN:78, TE:74) Elaborate Inquiry Activity: Make an Electromagnet (SN:81-82, TE:78-79) **Science Handbook – Electricity** p. 254-258
3-PS2-4. Define a simple design problem that can be solved by applying scientific ideas about magnets. **Clarification Statement** Examples of problems could include constructing a latch to keep a door shut or creating a device to keep two moving objects from touching each other	**MODULE - Electric and Magnetic Forces** **Module Wrap Up** Performance Project: Solve a Simple Design Problem (SN:86-87, TE:82-83) **Science Handbook –** Magnets p. 259-262
FROM MOLECULES TO ORGANISMS: STRUCTURES AND PROCESSES	
3-LS1-1. Develop models to describe that organisms have unique and diverse life cycles but all have in common birth, growth, reproduction, and death. **Clarification Statement** Changes that organisms go through during their lives form a pattern. For plant life cycles there is an emphasis on flowering plants.	**MODULE - Parents and Offspring -Lesson 1**: Life Cycles of Plants Performance Task: Plant Life Cycle Model (SN: 138-139,TE: 126-127) **Lesson 2:** Life Cycles of Animals Evaluate: Performance Task: Duck-Billed Platypus Life Cycle Model (SN: 152-155, TE: 140-141) **Module Wrap Up:** Performance Project: Comparing Life Cycles (SN: 168-169, TE: 154-155) **Science Handbook –** Characteristics of Living Things p. 42-45, Reproduction with Flowers p. 56, Animal Life Cycles p. 71-74

PERFORMANCE EXPECTATION	MODULE - LESSON
ECOSYSTEMS: INTERACTIONS, ENERGY, AND DYNAMICS	
3-LS2-1. Construct an argument that some animals form groups that help members survive. **Clarification Statement** Arguments could include examples of group behavior such as division of labor in a bee colony, flocks of birds staying together to confuse or intimidate predators, or wolves hunting in packs to more efficiently catch and kill prey.	**MODULE – Survival** - **Lesson 1**: Animal Group Survival Explore: Inquiry Activity: Ant Workers (SN: 175-176, TE: 160-161) Explain: Animal Groups (SN: 177-181, TE: 162-165) Elaborate: Research, Investigate, and Communicate – Minnow Observations (SN: 182-185, TE: 169-170) Evaluate: Performance Task: Animal Group Explanation (SN: 184, TE: 171-173) Evaluate: Essential Question: How does being part of a group help animals survive? (SN: 185, TE: 172) **Module Wrap-Up**: Performance Project: Honeybee Research (SN: 218-219, TE: 206-207)
HEREDITY: INHERITANCE AND VARIATION OF TRAITS	
3-LS3-1. Analyze and interpret data to provide evidence that plants and animals have traits inherited from their parents and that variation of these traits exists in a group of similar organisms. **Clarification Statement** Emphasis is on organisms other than humans and does not include genetic mechanisms of inheritance and prediction of traits. Data can include drawings, photographs, measurements, or written observations. Patterns are the similarities and differences in traits shared between offspring and their parents, or among siblings.	**MODULE - Parents and Offspring** -**Lesson 3**: Inherited and Learned Traits Explore : Inquiry Activity: Graphing Inherited Traits (SN: 159-160, TE: 144-145) Explain: Crosscutting Concepts: Cause and Effect (SN: 162, TE: 148) Explain : Research, Investigate, and Communicate: Pea Plants (SN: 165, TE: 151) Evaluate : Performance Task: Mouse Fur Color Inheritance (SN: 166-167, TE: 151-153) **Science Handbook –** Inherited Traits p. 76

PERFORMANCE EXPECTATION	MODULE - LESSON
3-LS3-2 Use evidence to support the explanation that traits can be influenced by the environment. **Clarification Statement** Examples of the environment affecting a trait could include normally tall plants grown with insufficient water are stunted or an animal that is given too much food and little exercise may become overweight.	**MODULE - Parents and Offspring- Lesson 3:** Inherited and Learned Traits Explain: Online Digital Simulation: Living Things and Their Inherited Traits (SN: 164, TE: 149) (www.connected.mcgraw-hill.com) Explain: Crosscutting Concepts: Cause and Effect (SN: 162, TE: 148) **Science Handbook –** Learned and Environmental Traits p. 77
BIOLOGICAL EVOLUTION: UNITY AND DIVERSITY	
3-LS4-1. Analyze and interpret data from fossils to provide evidence of the organisms and the environments in which they lived long ago. **Clarification Statement** Examples of data could include type, size, and distributions of fossil organisms. Examples of fossils and environments could include major fossil types such as marine fossils found on dry land, tropical plant fossils found in arctic areas, or fossils of extinct organisms and relative ages.	**MODULE - Learn from the Past – Lesson 1:** Things from Long Ago Performance Task: Research an Extinct Animal (SN: 282-283, TE: 268-269) **Lesson 2**: Fossils Explain: What Fossils Tell Us (SN: 290, TE: 276) Explain: Inquiry: Layers and Fossils, Part 2 (SN: 290-291, TE: 276-277) Explain: Science File: Fossils from Long Ago or Skeletons of Today (SN: 292, TE: 278) Explain: Online Simulation: Fossil Dig (SN: 293, TE: 279) (www.connected.mcgraw-hill.com) Evaluate Performance Task: Tell About Animals and Environments (SN: 298-299, TE: 282-283) **Module Wrap-Up:** Performance Project: Looking Back (SN: 300-301, TE: 284-285) **Science Handbook –** Fossils p. 174-177
3-LS4-2. Use evidence to construct an explanation for how the variations in characteristics among individuals of the same species may provide advantages in surviving, finding mates, and reproducing. **Clarification** Examples of cause and effect relationships could be plants that have larger thorns than other plants may be less likely to be eaten or animals that have better camouflage coloration than other animals may be more likely to survive and therefore more likely to leave offspring.	**MODULE – Survival –** **Lesson 3** - Natural Selection Explore: Inquiry Activity: Giraffe Feeding (SN: 205-206, TE: 192-193) Explain: Trait Variations and Survival (SN: 207, TE: 195-196) Explain: Inquiry Activity: Camouflage from Predators (SN: 208-210, TE: 196-198) Explain: Online Simulation: Rabbit Population (SN; 194-195, 212, TE: 199) (www.connected.mcgraw-hill.com) Elaborate: Inquiry Activity: Natural Selection in Minnows (SN: 213-214, TE: 201-202) Performance Task: Galapagos Finches (SN: 215-217, TE: 202-203) **Science Handbook –** Adaptations p. 94-102, Traits p. 103-106

PERFORMANCE EXPECTATION	MODULE - LESSON
3-LS4-3. Construct and support an argument with evidence that in a particular habitat some organisms can survive well, some survive less well, and some cannot survive at all. **Clarification Statement** Examples of evidence could include needs and characteristics of the organisms and habitats involved. The organisms and their habitats make up a system in which the parts depend on each other.	**MODULE – Survival** - **Lesson 2:** Adaptations Explore: Inquiry Activity: Bird Beak Adaptations (SN: 189-190, TE: 176-177) Explain: Inquiry Activity: Color and Heat (SN: 192-194, TE: 180-181) Explain: Inquiry Activity: Animal Fat (SN: 196, TE: 183) Evaluate: Performance Task: Design a Bird (SN: 200-201, TE: 187-189) **Lesson 3 –** Natural Selection Evaluate: Performance Task: Galapagos Finches (SN: 215- 217, TE: 203-204) **Science Handbook –** Adaptations p. 94-102
3-LS4-4. Make a claim about the merit of a solution to a problem caused when the environment changes and the types of plants and animals that live there may change. **Clarification Statement** Examples of environmental change(s) could include changes in land characteristics, water distribution, temperature, food, and other biological communities. Louisiana specific examples could include impacts related to levees, dams, crop rotations, irrigation systems, hunting limits, diversion canals, or sea level rise.	**MODULE - Changes in Ecosystems** - **Lesson 1**: Changes Affect Living Things Elaborate: Research, Investigate, and Communicate: Invasive Species (SN: 233, TE: 222) Evaluate: Performance Task: Beaver Dam Pros and Cons (SN: 234-235, TE: 222-223 **Lesson 2**: Natural Hazards Change Evaluate: Performance Task: A Wildfire Solution (SN: 250-251, TE: 237-238) **Lesson 3**: Humans and Natural Hazards Explain :Inquiry Activity: Landslides and Sandbagging (SN: 259-260, TE: 247) **Module Wrap-Up**: Performance Project: Landscaping: The Effects of Flooding on Buildings and Plants (SN: 267-269, TE: 254-255) **Science Handbook –** Changes in Ecosystems p. 92-93
EARTH'S SYSTEMS	
3-ESS2-1. Represent data in tables and graphical displays to describe typical weather conditions expected during a particular season. **Clarification Statement** Examples of data could include average temperature, precipitation, and wind direction. Examples of data representations could include pictographs and bar graphs.	**MODULE- Weather and Climate – Lesson 1:**Weather Changes Evaluate: Performance Task: Become a Meteorologist (SN: 103-105, TE: 97-99) **Module Wrap-Up:** Performance Project: Five-Day Forecast (SN: 122-123, TE: 112-113) **Science Handbook –** Weather p. 152-157

PERFORMANCE EXPECTATION	MODULE - LESSON
3-ESS2-2. Obtain and combine information to describe climates in different regions around the world. **Clarification Statement** Information could include rainfall and temperature data.	**MODULE - Weather and Climate - Lesson 2**: Different Climates Explore: Inquiry Activity: Compare Weather Patterns (SN: 109-110, TE: 102-103) Online Simulation: Comparing Data (SN: 114, TE: 106) (www.connected.mcgraw-hill.com) Elaborate: Inquiry Activity: Land and Temperature Change (SN: 117-118, TE: 108-109) Evaluate: Performance Task: Create a Climate Travel Poster (SN: 119-121, TE: 110-111) **Module Wrap-Up:** Performance Project: Five-Day Forecast (SN: 122, TE: 112-113) **Science Handbook –** Climate p. 164-167
3-ESS3-1. Make a claim about the merit of a design solution that reduces the impact of a weather-related hazard. **Clarification Statement** Examples of design solutions to weather-related hazards could include barriers to prevent flooding (including levees), wind-resistant roofs, tornado shelters and lightning rods.	**MODULE- Changes in Ecosystems**- **Lesson 3:** Humans and Natural Hazards Explain: Inquiry Activity: Landslides and Sandbagging (SN: 259, TE: 247) Evaluate: Performance Task: Building Weatherproof Structures (SN: 263-266, TE: 251-253) **Module Wrap Up:** The Effects of Flooding on Buildings and Plants (SN: 267-269, TE: 254-255) **Science Handbook** – Weather Events p. 168-173